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Original Department.

Communications.

INSTRUMENTAL DIAGNOSIS.

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(Continued from page 402.)

Ophthalmoscopy.

The ophthalmoscope, from ὀφθαλμος, the eye, and σκοπεῖν, "to view," is an instrument designed for the inspection of the interior of the globe of the eye.

The obscurity of the interior of the eye had been thought, up to a certain period, to depend upon the absorption of the rays of light, entering it through the pupil, by the pigmental membrane lining it; and, therefore, as there were no reflection, the parts within must remain invisible. However, the luminosity of the eyes of certain animals, as the cat and rabbit, and even those of the human subject in that remarkable condition called albinism, remained as a fact, which call for an exactly reverse explanation, and led to a closer scrutiny into the causes of the difference of luminosity in the eyes of man under ordinary conditions, and in those of the brute animals above mentioned. The conclusion arrived at, from a closer examination of the subject, was that, in both instances, there was luminosity, or a reflection of the incident rays from the bottom of the eye, but that in man the choroidal pigment was deeper colored than in animals, and was, therefore, inferior in power as a reflecting surface; while an additional reason was found in the manner in which the eye was ordinarily examined. The head of the observer, in order to catch the emergent rays, must be interposed between the luminous body and the eye, so that the rays emitted from the former were effectively cut from entering the eye. With these facts known, it was easy and rational to conjecture that with proper care in managing a light, as to its distance, intensity, and quantity, and in placing the eye of the observer in suitable position, these reflected rays might be received by the latter and the observed retina seen.

Mr. Cumming, in the 29th Vol. of the "Medico-Chirurgical Transactions," was among the first to develope this method of ocular examination; he states that in the majority of cases the retina may be seen in the following manner. Let the person, under examination, sit or stand eight or ten feet from a gas-light, looking a little to the side; standing near the gas-light, we have only to approach as near as possible to the direct line between it and the eye to be viewed, at once to see the reflection. Or, in a dark room, a candle being placed four or five feet from the eye, if we approach the direct line between them we shall be able at once to see it in many cases. If solar light be admitted through a nearly-closed shutter into a dark room, the luminosity may be seen when the pupil is tolerably dilated, the patient standing five or six feet from the aperture, and the observer occupying the position before indicated.

In this mode of examination the observer was compelled to keep his head a considerable distance from the observed eye in order that it might not cut off all the rays coming from the luminous body, which would most certainly occur by a nearer approach. At any distance more or less of them must necessarily be intercepted by the head occupying any position between the source of light and the eye under examination. This unavoidable difficulty, and the great distance of the observer from the eye to be viewed, rendered this plan of ocular exploration almost futile as a diagnostic means in ophthalmic disease.

This was the unsatisfactory condition of the problem when Helmholtz, Professor of Physiology at Heidelberg, took up the

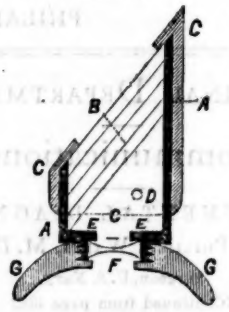
subject, and by patient investigation and experiment, resolved it in the most satisfactory manner, and invented the first ophthalmoscope in 1851.

The optical principles involved in the construction and application of the instrument are simple. If a plain mirror be held before the eye, receiving light from a luminous body placed in certain relation with it, the rays are reflected from its surface into the interior of the eye, where they form an inverted image of the luminous body, upon or in the neighborhood of the *macula lutea* of the retina, after having undergone various changes in direction by passing through the refractive media, the cornea, aqueous humor, crystalline lens, and vitreous humor. The rays, after forming this image, are reflected from the retina to the exterior exactly in the reverse direction of their entrance, and fall upon the surface of the mirror. If now this be transparent or if opaque, perforated at the centre with an aperture, those rays not reflected again will continue in their course to the rear of the mirror where, if the eye of an observer be placed, they will be received upon his retina, and display the bottom of the globe of the observed eye.

But the emergent rays are refracted by the media of the observed eye, so as to be convergent so that the normal eye of an observer, which is adjusted only to receive parallel or slightly divergent rays, will not see the retina distinctly until these rays are rendered parallel. This change in the direction of the rays is effected by means of a double-concave glass placed behind the mirror. This lens is not indispensable, for the same result may be obtained by directing the person whose eye is under observation to regard a distant object, when an adjustment will be effected for the reception of parallel rays, and necessarily the emergent rays will also become parallel.

The instrument of Helmholtz, based upon these simple optical principles, consists, as shown in the figure, of four superposed transparent glass plates, *B*, fitted obliquely into the bevelled end of the short tube *A*, by the cups *C C*, at an angle of fifty-six degrees with the dotted line *C*, which is at right angles with the base of the tube. The proximal end of the tube is fitted with a diaphragm, and supports a screw cap, *C C*, holding a double-concave lens, *E*, of about ten inches focal length. In myopic, presbyopic or hypermetropic conditions of the eye, lens of other strengths will be required.

Fig. 1.



Helmholtz employed the four glass plates in his reflector, because they enabled him to obtain the greatest amount of illumination with the least inclination of the reflecting surface; and at the same time the eye was better shaded, and the plates seen through more easily than could have been the case had only one plate been used from which to obtain the same amount of illuminating power, would have required it to have been placed at a greater angle, 70°. Another advantage of the combination is, that the polarized light reflected from the cornea, which materially obscures the clear perception of the retina, is stopped by the plates, whilst the other rays depolarized by reflection from the retina pass through it to the eye of the observer.

The instrument now described, although sometimes useful when there is great sensitiveness of the retina, or when the examination is made without the preliminary dilation of the pupil, is now scarcely ever employed. Its place has been usurped by instruments with concave reflections of silvered glass or lightly polished metal, which, although a positive improvement on the old instrument, yet are based upon exactly the same optical principles. These modifications are exceedingly numerous, and nearly every ophthalmoscopist has more or less varied the instrument to suit his own views of convenience or efficiency.

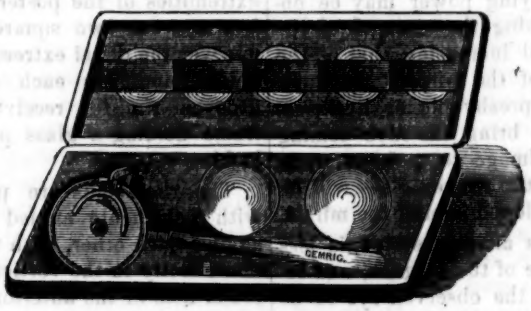
The merit of first adopting the concave mirror, I believe, belongs to M. Ruete, while in connection with the history of its subsequent modifications are connected the

names of many distinguished European ophthalmologists, of whom may be pre-eminently mentioned JAEGER, STELLWAG, ULRICH, ANAGNOSTAKIS, and LIEBREICH.

The instrument of the latter surgeon particularly is deserving of particular attention, as it is the one that is now generally employed, and from its simplicity and efficiency deservedly so.

The instrument, as shown in the annexed cut, is compactly arranged in a neat and portable case containing the necessary lenses required by any abnormal condition of either the eye of the patient or surgeon. The concave mirror, which is of silvered glass, is backed by a blackened metallic disc, and enclosed in a rim of the same material, which holds these two portions in close contact. A spring clip of circular outline is attached to the margin of the mirror, movable in a lateral direction, and

FIG. 2.



intended to support the smaller lens, of which there are five; four of them are double-concave and of the respective focal lengths of 6, 8, 10 and 12 inches; the fifth glass is double convex with 12 inches focus; to the rim of the mirror a short handle is fastened by means of which it can be conveniently held while being used. There are also two large double-convex lenses in the case, of 2 and 3 inches focal lengths, to be interposed between the mirror and the eye under examination, which magnify the retinal image.

Ophthalmoscopes constructed with the concave mirror and central aperture have the advantage over the plain mirror of greater illuminating power, as the light received upon its surface is converged in reflection, and the rays meeting just behind the crystalline lens, over-cross and again diverge before they fall upon the retina, thus forming a large circle of dispersion, which illuminates a more considerable portion of the membrane. The emergent rays passing through the central aperture are convergent, and, as in the instrument of HELMHOLTZ, require the employment of a double-concave lens behind the mirror to render them parallel before being received into the eye of the observer.

In using the concave mirror alone, or what is called the *direct method* of examination, or the method with an erect image, the retina is greatly magnified, and the finest details of retinal change may be detected; at the same time as a compensation for this advantage, the eye of the observer is much more fatigued in the examination, and requires more practice to obtain satisfactory results than the other mode of retinal exploration, or that with the inverted image. Here also all the refractive anomalies, both of the observing and observed eye, must be corrected by the use of appropriate glasses in order to secure a clear and distinct view of the parts within the visual field. This plan is better adapted to the discovering of morbid changes in the anterior portions of the eye, crystalline lens, and vitreous humor, than those in the retina.

To get rid of the disadvantages of limitation of the visual field, feeble illumination, the necessity of changing the glasses for correcting refractive anomalies, and the greater fatigue to the eye of the observer, a double-convex glass may be placed between the mirror and the eye observed. This is called the *indirect* method of examination, or the method with the inverted mage.

The effect of this lens, which for ordinary purposes may possess a focal length of from two to four inches, is to greatly increase the extent and brilliancy of the visual field by increasing the already convergent rays reflected from the mirror so as to focus them anterior to the crystalline lens, so that when they again diverge a very large circle of dispersion will be produced. The emergent rays will undergo a corresponding amount of refraction, and after meeting at the principal focus of the lens between it and the mirror, will form a well defined inverted image of the retina. Now to perceive this image it will only be necessary to approach or withdraw the mirror from the face of the patient, according as the observed eye is myopic, or hypermetropic.

The inverted image may be magnified by placing a double-convex lens in the fork of the mirror; Liebreich's instrument is furnished with one of 12 inches focus. Still more magnifying power may be obtained by diminishing the strength of the objective glass, and increasing that of the lens in the rear of the mirror. In those persons who are presbyopic or hypermetropic, in order to bring the rays coming from the retinal image to a focus upon their retina, the little convex glass will be required to be employed behind the mirror.

This method, as already stated, is less fatiguing to the eye of the surgeon, and requires the pupil of the observed eye to be dilated with atropia. A solution of moderate strength, one grain to the fluid ounce of water, will cause the requisite amount of dilatation in a few minutes, without impairing the functions of the eye for several hours afterward, as results from the use of stronger solutions.

All of the ophthalmoscopes that have been mentioned above require the use of one eye only, that is, they are *monocular*. We have now to speak of a beautiful instrument based upon exactly the same principle as the former, but differing from them in being arranged for *binocular* view, so that the parts under observation have all irregularities upon their surface brought out in relief in the same manner as the outlines of a picture are brought out by the stereoscope.

The modifications of the binocular ophthalmoscope consist in placing behind the mirror a metallic box $3\frac{1}{2}$ inches long, $\frac{3}{4}$ inch wide, and $\frac{1}{2}$ inch thick. This box contains two rhomboidal pieces of glass; the right one being in two sections. The distal section is moveable by means of a screw attached to its farthest end, so that the combined lengths of the rhombodic may be increased or diminished half an inch, according to the distance between the observer's eyes. The middle part of the face of the box has an orifice which corresponds exactly in size and position with the aperture in the mirror; the relation of the two apertures is secured by the mirror being attached by the extremities of its axis to two little uprights on the anterior face of the box, in such a manner as to allow it to be adjusted in the proper position for receiving and reflecting the rays coming from the lamp, which with this instrument ought to be placed above the patient's head, into the pupil. The outer extremities of the posterior surface of the box possess two square openings which uncover the distal extremities of the rhomboidei, and are each surrounded by a grooved rim for receiving a little metal frame holding a glass prism with its base looking outward.

The rhomboids are placed in the box with their acute angled extremities lying against each other, with their line of junction exactly in the vertical diameter of the round hole in the anterior wall of the box; the diagonal acute angles will, therefore, necessarily correspond with the openings at either end of the box. Placed in this manner a pencil of rays entering through the aperture in the mirror will pass half of them through one acute angle and half through the opposite one, until they encounter the contiguous oblique faces of the rhomboidei, whence they will undergo reflection horizontal outwards, to be received upon the external oblique faces opposite these, where their direction is again changed, and the rays pass out of the apertures in the ends of the box, the rays on the two sides being parallel. In order that the eye of the observer may now be able to receive them, their direction is again changed outwards by the two little prismatic glasses above spoken of.

This instrument thus arranged is mounted

upon a short handle, and is used exactly as other sorts of ophthalmoscopes. It requires no more skill in its management than the instrument of LIEBREICH, and presents a beautiful appearance of the fundus of the eye. I frequently use it, and now, having had ample experience in its manipulation, prefer it to the ordinary instrument.

Other less available and less useful forms of ophthalmoscopes have been described and recommended by certain observers. They are of two sorts—fixed ophthalmoscopes and auto-ophthalmoscopes.

Fixed ophthalmoscopes are so named because they are attached in some manner to the table upon which they rest, and have certain mechanical arrangements by which the head of the patient is rendered immovable while the examination is being carried on.

There are several forms of this instrument, but those of LIEBREICH and FOLLIN are the best, affording every facility and advantage that can be obtained from any of them. Their utility is apparent in clinical teaching, as any pathological change in the fundus of the eye may be fixed upon and shown to any number of persons; also in accurate investigations into the more minute anatomical alterations in the fundus, involving microscopic and micrometrical manipulations, and in sketching the appearances observed, the fixed instruments are indispensable.

The ophthalmoscope of LIEBREICH consists of two short tubes, ensheathed the one within the other, and moved by a rack and pinion arrangement to focus the instrument. The outer tube bears at its proximal end a perforated concave mirror, which turns freely upon its vertical axis, and has its surfaces entirely exposed by the removal of a portion of the tube upon each side. The inner tube has at its distal end a double-convex lens of $1\frac{3}{4}$ or 2 inches focus, also movable upon its vertical axis.

This tube is encircled near the lens by a metallic band to the lower part of which the stem which supports the instrument is attached. The stem is so arranged as to fasten by a clamp to a table or stand, and has connected with it two arms moving vertically and horizontally upon it. One of the arms is terminated by a metallic arc, and is intended to support the forehead of the patient; the other arm supports a padded cup-shaped receptacle to receive the chin. By this arrangement the head is immovably fixed, and the eye may be brought into any desired relation with the objective lens. To the margin of the tube near the lens a pointed rod bearing a small ball is articulated in such a manner as to enable the ball to be placed in any position, so that the eye of the patient, as he regards the ball, may be also turned in any direction.

The patient's face is shielded from the light by a screen supported upon the brass band, and the observer's eye has a smaller screen interposed between it and the lamp. The inner tube and the rod reaching to the forehead of the patient is graduated in millimetres, so that the distance of the observed eye, and that of the mirror from the lens, can be ascertained at a glance.

From this description the application and adjustment of LIEBREICH'S ophthalmoscope may be readily perceived.

In microscopic examinations LIEBREICH replaces the tubes of his instrument with the body of a SCHRECK'S microscope.

A further improvement consists in adapting to the inner tube of the ophthalmoscope a circular glass plate graduated horizontally and vertically in millimetres. The plate is fastened to a stem in such a manner that it may be moved upon its vertical axis, or near to, or further from the eye.

By attaching a camera lucida to the end of the tube, the image formed within it may be projected upon a sheet of paper placed beneath it.

The fundus of the eye may also be photographed by using a small concave metallic mirror in connection with the camera lucida, and receiving the image upon a plate prepared in the usual manner of photographers.

The ophthalmoscope of FOLLIN does not vary in essential details from the one we have now described, so that besides a little more convenient mechanical arrangement of its parts, the two instruments are identical, and in their working afford about the same practical results.

To COCCIUS is due the merit of having first drawn attention to, and developed the principle of auto-ophthalmoscopy. He em-

ployed a simple plain mirror perforated at its centre; this he held with its reflecting surface opposite the eye to be examined. A lamp was placed behind the mirror, the rays of light passing through the central aperture illuminated the fundus of the eye, and returning met the mirror in front, when being reflected again into the eye, formed an image of the papellæ upon the macula lutea; the instrument really supplying a means of an eye viewing its own interior.

A more efficient and convenient auto-ophthalmoscope is that contrived by Giraud-Teulon. It is an instrument of simple construction, and one with which I have been enabled to work upon my own eyes with very satisfactory results.

It is so arranged that the fundus of one eye can be inspected by the retina of the other. The optical principles are few and simple, and, therefore, they require but a cursory description to enable the reader to readily appreciate the mechanical construction and operation of the instrument. In the first place two plane mirrors are placed before the eyes, one in front of each, inclined at such an angle that the rays of light striking upon one of them shall be reflected upon the other, and from this into the eye. The fundus of either eye can be examined, we shall illustrate by selecting the left as the one under examination; in this case the ordinary concave mirror is to be placed before the right eye, and a bi-convex lens before the left. The rays of light emitted by a lamp, suitably posted, are received upon the concave mirror, and reflected upon the right reflector at such an angle as to undergo another change in their direction upon striking the left reflector, which will bring them in a parallel position with the left ocular axis. As a bi-convex lens is interposed between the mirror and this eye, before the rays can reach the fundus of the latter they are converged so as to overcross somewhere in the anterior portion of the eye, and form dispersion circles upon the retina. After emerging from the eye, in the same course, but contrary direction to their entrance, the rays returning through the bi-convex lens tend to form an actual inverted image of the fundus behind the mirror opposite it, but the latter after receiving the rays, reflects them so that the actual inverted image is formed at the same distance before the mirror as it tended to do behind it. The rays from the image continue in their course to the mirror in front of the right eye, upon which they strike at such an angle that they are reflected in a parallel direction with the right ocular axis into the eye. An inverted image of the fundus of the left eye will now be seen by the right in the mirror before it, as if it were situated in the rear of the mirror.

With this instrument the virtual erect image may also be seen by removing the lens and approaching the eyes nearer the mirrors.

Other forms of the ophthalmoscope are sometimes employed. Among these we may mention the bi-convex and bi-concave lenses silvered upon one of their sides, but the knowledge of the optical effects of these lenses upon light, shows that they act upon the same principle as convex and concave mirrors.

Convex mirrors with the light condensed upon their surface have also had a certain number of admirers, and they certainly do possess some advantages.

The orthoscope is an instrument that enables the retina to be examined under water. It consists of a little cup or basin, of glass, which is filled with water and applied to the eye. From the refractive effects of the water upon the light proceeding from the fundus of the eye, the retina is apparently changed in its position, and is seen as if it were in advance of its true position.

[To be continued.]

Our National Cemeteries.

The cities live at the expense of the country. Families are exhausted and die out, and their places are filled by new-comers from the country. This was illustrated by the case of Paris, where it was estimated by a writer in 1842, that among 300,000 people then living it Paris, there were probably not 1,000 who could trace their families in that city back 200 years; or, the 200,000 people living in Paris in the reign of Louis XIII., instead of multiplying to 400,000 in two centuries, had dwindled down to 1,000. According to Price, 10,000, and according to Hume, 5,000 from the country are necessary to keep the London population up to its number.

Medical Societies.

THE AMERICAN MEDICAL ASSOCIATION.

MINUTES OF THE 19TH ANNUAL SESSION.

(Continued from p. 435.)

Washington, D. C., May 8, 1868.

At 12 o'clock, Dr. John L. Atlee, of Pennsylvania, escorted to the platform the newly-elected President, Dr. WILLIAM O. BALDWIN, of Montgomery, Alabama.

The appearance of these gentlemen was the signal for enthusiastic applause, and when silence had been restored, Dr. Atlee introduced Dr. Baldwin to the convention through the retiring President, Dr. Gross, and the manner in which the latter welcomed his successor thrilled the hearts of all present with patriotic joy. Dr. Gross said:

I welcome you as the representative of our long lost brethren. May God bless you; God bless your people; God bless all of us.

Dr. BALDWIN then delivered the following address:

Mr. President and Gentlemen of the American Medical Association: In returning you my sincere thanks for the honor you have conferred upon me in electing me to preside over the deliberations of this body, an Association which embraces in its membership so many names justly distinguished over the civilized world for genius and learning—believe me, gentlemen, it is with feelings of embarrassment equalled only by my profound sense of gratitude and my admiration for the magnanimity which prompted the offering. It is the more grateful to me that it was the free unasked for gift of the Association. I did not seek the position. High as the honor is, I should deem it purchased at too dear a price, if, in order to obtain it, it had been necessary for me to solicit the votes of any men from any section, even those from my own society.

I am painfully conscious, gentlemen, of my own unworthiness of this high distinction, and am not vain enough to appropiate the honor all to myself. I do not accept it as an individual compliment, but rather as the faithful hand of brotherhood stretched out with a generous friendship and true nobility of soul in its desire to heal and obliterate the wounds in its own bosom, for whose creation it was in no way responsible.

Pardon me for taking this opportunity for alluding briefly to a subject which has not, perhaps, heretofore been considered germane to occasions like the present, and which I now approach with pain and hesitation. I am sure that most of you have not failed to observe the very meager representation which this Association has had from the Southern States since the close of the late war. This has probably been due to several causes, to only one of which, however, I desire to allude. I will not disguise the fact that there are many physicians in the South disposed to hold themselves aloof from your councils.

The resolutions passed at your meetings in 1866, offering again the hand of fellowship for your Southern brethren, owing to the peculiar condition of our country at that time, and the fact that but little of the medical literature and news of the North reached the South, or met the eye of but few, and there are still among us those who feel that your hearts are still stolid against them, and who believe that, notwithstanding some formal declarations to the contrary, most of you, in your private feelings, have not yet been able to rise sufficiently above the prejudices of the past to enable you to receive them in such a manner as to make their presence here either agreeable to them or profitable to the Association.

Looking to this conviction of theirs, strengthened by the fact that they are still under the cloud of the nation's displeasure, and denied the political rights to which they esteem themselves entitled, they have felt that it would be both undignified and unmanly to present themselves at your doors for admittance to your councils, or to offer to affiliate with you until they can come as your peers in all things—in political and social rights, as well as in scientific zeal and devotion.

So far as my observation has extended, I am sorry to know that these sentiments have prevailed with many, and it is but frankness in me to say so. I am free to confess that I, with many others, have not sympathized altogether with these feelings. I saw the resolution adopted in 1866, and before referred to, inviting us, in most respectful and conciliatory language, to resume our places in this Association. I felt this was all you could do, all we could ask, and was satisfied with it, and only regret it did not obtain a more general circulation. The society to which I belong, with entire unanimity, appointed its full quota of delegates to this meeting. I came here to lend my humble example to the work of re-establishing our former relations. I never doubted I would be received with courtesy, and even with kindness.

The broad, liberal, and catholic sentiments proclaimed from this stand in the annual address

of that noble old Roman, our distinguished president, Dr. Gross, knowing in these halls "no North, no South, no East, no West"—he whose clustering honors, though won in your midst, yet gather a beauty and brilliancy from the love and veneration in which he is held in the South—must be received as a declaration of sentiments and principles by this Association, and cannot fail to correct the errors and misrepresentations which have prevailed in our section. This action of yours to-day, in awarding through me as one of her humble representatives, the honorable and distinguished office of president of this Association, a position which might well be claimed for one of the many of your own renowned and gifted sons, will, I am sure, testify to our brethren of the South, in silent but forcible language, the injustice which has been done you by those who have taken a different view of your real sentiments and feelings toward us.

In saying this much I do not intend it as a reproach to those of my section who have hitherto so misunderstood you, and you, in your generosity, I am sure, are prepared to concede much to the pride of a noble manhood, who, standing amidst the memories of blasted hopes and ruined fortunes, have, perhaps, been disposed to guard with too jealous and sensitive an eye that which is dearer to them than fortune or life itself, and which I am sure you would be the last to willingly see compromised—their personal and professional dignity and honor.

For myself, and for those whom I represent, I grasp with unaffected pleasure the hand which you have so gracefully and magnanimously offered, and I hope and believe this sentiment will meet a ready response from all our brethren of the South. *Let us again be united as friends and brothers.* Ignoring past and present political differences, let us exhibit to this distracted country, an example of forgiveness and toleration worthy the emulation of a great and noble people. Let the bonds which we acknowledge here, bind us in all portions of this broad land as a sacred brotherhood, engaged in a common toil, with one mind, one heart, and one purpose. Let the place annually selected for our meetings be our Mecca. There let us meet with harmony of sentiment for thorough organization, for connected and concerted action, without which no great science or art can ever attain its highest perfection. Exacting from each other only the qualifications necessary for honorable membership, let us there mingle in the sacred precincts of our humane profession, and join hands and sympathies in the strengthening influence of association and fellowship; and as we lay fresh offerings in the temple of a noble science, and build new fires on her altars, let us cherish in our hearts the ennobling sentiment of brotherly love.

In conclusion, I would say we have doubtless most of us, aye, certainly most of us, in that land of many sorrows from whence I came, tasted the bitter fruits of the bloody and unholy war through which we have passed, and wept over its dire calamities. *We*, as an Association, had no agency in its creation. It belongs now, with all its disasters and miseries, to the dead past, and as *we* had no cause for quarrel then, we have none now for separation or estrangement. We may not forget our sorrows for the past, and we will still water with our most sacred tears the graves of our noble sons who fell victims to the strife. But whenever there is a grief at the heart, a tear for the ashes of the past, let us wipe from it all traces of bitterness, and drape its memories and sanctify its sadness with the Christian virtues of CHARITY, FORGIVENESS, and FRATERNAL LOVE.

During the delivery of the address the speaker was frequently interrupted with applause, and on concluding was the recipient of the hearty congratulations of those on the platform.

The President, Dr. Gross, said he desired to avail himself of this opportunity to correct an erroneous statement which had gained publicity throughout the Southern States, in regard to a resolution alleged to have been passed by this Association, recommending that the Government should make surgical instruments and medicines contraband of war. He said, I take this occasion to deny that the American Medical Association ever passed any such resolution, and hope our President elect will do everything in his power to promulgate this fact among our Southern brethren.

Dr. Davis desired to say, in addition, that not only had no such resolution ever been adopted, but that it had never been introduced.

This statement was, on motion, ordered to be recorded in the transactions of the Association.

An invitation was read from the Young Men's Christian Association, for the Medical Association to visit their Library and Reading-room.

On motion, the Committee on Archives was continued.

On motion, the Secretary was instructed to appoint a sub-Committee of Arrangements of three from each State.

Dr. N. S. Davis, of Illinois, offered a resolution instructing the Chair to appoint a Committee

of three to report at the next session, on the practicability of establishing a Library of American Medical works, including books, monograms, and periodicals. Adopted.

The Association then adjourned till nine o'clock to-morrow.

In the evening the members visited the Capitol to witness the illumination of the dome, the 1300 burners therein being lighted by electricity. The Rotunda was densely crowded before eight o'clock, the tholus and lights above the pictures having been lighted shortly after seven o'clock. At eight the gas was turned off, leaving the Rotunda in total darkness, and a few minutes thereafter the illumination of the dome took place. First the jets in the eye of the dome, immediately under Brumidi's picture, were lighted, showing the picture in brilliant light, and time was given to examine the same before the remaining burners were lighted by sections, and soon the entire dome was illuminated, presenting a magnificent scene, which drew warm applause from the large assemblage. Prof. Sam'l Gardner, the Electrician, and his Assistant, Mr. D. Small, then escorted the visitors to the battery and electrical engine rooms, where they explained the workings of the machinery, showing the manner of lighting parlor chandeliers, street lamps, etc. All were much pleased with the exhibition, and retired about nine o'clock.

The members then proceeded to the residence of Chief Justice CHASE, where they were cordially received, and partook of a bountiful collation, after which they proceeded to the residence of Mayor WALLACH, where the same hospitalities that have been extended to them during their stay in the city were given them.

FOURTH DAY—*Friday, May 8th.*

The convention resumed its session this morning at 9, A.M., Dr. GROSS in the chair. An invitation to visit Mount Vernon was read and accepted; also, an invitation from Mr. KING that he be allowed to take a photograph of the Association, which was accepted, and at 10 o'clock the picture was taken in front of the hall. The following, offered by Dr. Martin, of Massachusetts, was adopted:

It seems proper that this Association should not be without a Committee on a subject so transcendently important as that of Vaccination; therefore,

"*Resolved*, That a standing Committee of one be appointed upon the whole subject, to report from time to time on such topics connected with Vaccination as shall, in the estimation of such committee, appear of chief practical interest and importance to the profession."

Dr. Antisell, of Washington, was appointed as the Committee.

The Committee on Nominations made the following supplemental report, which was adopted:

Assistant Secretary—Dr. A. J. Semmes.

Committee of Arrangements—Drs. J. G. Richardson, S. M. Bemis, C. Beard, L. T. Pimm, D. Warren Brickell, S. Chopin, and W. S. Mitchell.

On Medical Education—Drs. J. C. Reeve, Dayton, Ohio; J. S. Hildreth, Chicago; W. C. McCook, Pittsburgh, Pa.; Frank Rice, Memphis, Tenn., and S. H. Pennington, Newark, New Jersey.

Committee on Necrology—Drs. C. C. Cox, Maryland; E. B. Stevens, Ohio; W. F. Peck, Iowa; H. Van Dusen, Wisconsin; J. M. Toner, District of Columbia; Joseph Simpson, U. S. Army; J. C. Weston, Maine; Henry Bronson, Connecticut; Henry Noble, Illinois; Charles Eversfield, U. S. Navy; T. Parvin, Indiana; J. C. Hupp, West Virginia; Joseph Mauran, Rhode Island; J. M. Keller, Tennessee; H. F. Askew, Delaware; H. J. Clark, Massachusetts; E. M. Moore, John Shrady, New York; Charles A. Logan, Kansas; —— Stewart, Minnesota; Henry Miller, Kentucky; S. G. Armor, Michigan; John Blane, New Jersey; A. Fleming, Edward Wallace, Pennsylvania; D. Arnold, Georgia; J. S. Wetherly, Alabama; S. L. Welch, Texas; T. M. Logan, California; John W. H. Baker, Iowa; P. A. Stackpole, New Hampshire; L. S. Joynes, Virginia; D. W. Brickell, Louisiana; David Booth, Mississippi.

Committee on Literature—Drs. Ed. Warren, Baltimore; Joseph Jones, Nashville; Ed. Andrews, Chicago; J. J. Woodward, U. S. Army; P. S. Wales, U. S. Navy.

Committee on Climatology—Drs. J. C. Weston, Maine; P. A. Stackpole, New Hampshire; Hy. James, Vermont; Alfred C. Garrett, Massachusetts; C. W. Parsons, Rhode Island; E. K. Hunt, Connecticut; W. F. Thomas, New York; E. M. Hunt, New Jersey; D. F. Condie, Pennsylvania; O. S. Mahon, Maryland; J. Harris, Georgia; George Engleman, Missouri; R. F. Michael, Alabama; T. J. Heard, Texas; R. C. Hammell, Illinois; J. F. Hibberd, Indiana; T. Antisell, District of Columbia; J. O. Hughes, Iowa; Abraham Sager, Michigan; T. L. Neal, Ohio; F. W. Hatch, California; B. W. Avent, Tennessee; E. A. Hildreth, West Virginia; —— Owen, Virginia; Samuel Willey, Minnesota; L. B. Bush, Delaware; G. W. Lawrence, Arkansas; ——

Compton, Mississippi; Louis T. Pimm, Louisiana.

Committee on Prize Essays—Drs. S. M. Bemis, J. Scott, D. W. Brickell, S. A. Smith, C. Beard, all of New Orleans.

Special Committee on Alcohol and its relations to Medicine—Drs. John Bell, J. R. W. Dunbar, and Richard S. McSherry.

On Cryptomatic Origin of Disease, with special reference to recent Microscopic Investigations on that Subject—Dr. Curtis, U. S. Army.

On Diseases of the Cornea—Dr. J. L. Hildreth, of Chicago.

On Excision of Joints for Injuries—Dr. J. B. Read, of Savannah.

They also reported the following resolution, which was adopted:

Resolved, That those gentlemen who desire to report on special subjects, and will pledge themselves to report at the next meeting, be requested to send their names and the subjects they desire to report upon to the Secretary of the Association.

Dr. C. A. Lee, of New York, was appointed a delegate from the Association to the meeting of Superintendents of Hospitals for the Insane.

Professor Henry, of the Smithsonian Institute, was invited to a seat on the platform.

Reports were made from the different sections, which were adopted.

A paper submitted by Dr. Joseph Jones on Albinism in the negro race, was recommended to the Smithsonian Institute for publication.

The thanks of the Association were returned to the Baltimore and Ohio railroad; Philadelphia, Wilmington and Baltimore road; Orange and Alexandria, and other railroads, for facilities shown to the members of the Association.

The thanks of the Association were also tendered to the President of the United States, Speaker Colfax, Chief Justice Chase, Hon. Richard Wallach, Professor Samuel Gardner, electrician United States Capitol; Dr. Woodward, of the Army Medical Museum; the Committee of Arrangements, of which Dr. Tyler is chairman; and Hon. Edwin D. Morgan, for their politeness and courtesies to the Association. Also to the press of the city for the correct reports of the proceedings.

The President appointed the following gentlemen as delegates to foreign medical societies: Samuel J. Jones, of Chicago; G. C. Blackman, of Cincinnati; Fordyce Barker, of New York; to which committee Dr. Gross, President of the Association, was added.

The President read a letter from Hon. George Bancroft, our Minister at Berlin, relative to Professor Aaron Brüke, the great microscopist, who is now blind.

On motion, Dr. Gross, the President, was authorized to send a letter on behalf of the American Medical Association, complimentary of Professor Brüke.

Drs. Howard and Dunbar, of Baltimore, and Dr. C. H. Nichols, of District of Columbia, were appointed a committee on the subject of Marine Hospitals.

Dr. Wetherly, of Alabama, spoke of the next meeting of the Association, and declared that he had no doubt the members would be gladly welcomed and as hospitably entertained in New Orleans as at any place where they had ever met. [Applause.]

Dr. Gross then arose and spoke as follows: Before the question of final adjournment is put, allow me to tender you my cordial acknowledgments for the kindness and courtesy which you have extended to me as your presiding officer. Gratitude and good taste alike prompt the expression of my feelings. In everything I did I felt that I had your generous support and sympathy; whatever errors may have been committed were errors of the head and not of the heart, and are, I am sure already forgotten by you. I congratulate you upon the manner in which you have conducted your proceedings. It is questionable whether there ever was a deliberative body of such magnitude in which there was so little discord, or so little said and done of an objectionable character. Harmony, cordial and complete, prevailed from the beginning to the end. There was, indeed, not one word uttered that any one, even the most fastidious, might wish to recall; a circumstance the more surprising when it is recollected that men in the heat of debate often give way to heedless and unguarded expressions calculated to ruffle the feelings, and to engender unpleasant reminiscences. We have accomplished not a little work, and, above all, we have had an opportunity of reviving friendly feeling, of extending our acquaintance with each other, and of interchanging sentiments in regard to matters of vital importance to our beloved profession. I am sure that every one will say, as he leaves this hall, that it was good for him to have been here, and that he will return to his home with new resolves, and determined to devote himself more earnestly than ever to the advancement of the glory of his noble calling; that he will strive more than ever to elucidate its great principles, and that, abandoning all other pursuits, he will worship medicine as the only goddess of his idolatry. Hoping that no evil may befall you on

your homeward journey, and that your families may greet you with messages of peace and glad tidings, I bid you a cordial and affectionate farewell.

The Association then adjourned *sine die*.

About noon the delegates embarked on board the steamer Arrow, and proceeded on an excursion to Mount Vernon. The day was fine, and the arrangements for music, entertainment, etc., perfect.

Appropriate addresses were made by Drs. Sayre and Harris, of New York, Davis, of Illinois, Baldwin, of Alabama, Hooper, of Mass., and Condie, of Philadelphia.

A card of thanks, signed by the delegates, was presented to Mr. Sykes the proprietor of the steamer, and Captain Stackpole.

The excursion returned to Washington about 5 o'clock.

[On account of the fullness of our Report we are compelled to postpone the Reports of the Sections to our next number.—EDS.]

EDITORIAL DEPARTMENT.

Periscope.

Syphilis Communicated by a Kiss.

Dr. A. M. SIGMUND, of Shimersville, Pa., reports the following cases in the *Humboldt Medical Archives*, of syphilis communicated by a kiss. Such instances are by no means unparalleled, but they are not, as he imagines, cases of communication of tertiary syphilis, properly so called. It should rather read *constitutional* syphilis. No doubt ought now to exist as to the communicability of syphilis from its later lesions.

On August 24th, 1867, I was called to see Miss M. H., aged 17 years, well developed, and to all appearance in good health, with the exception of a large and painful ulcer on her upper lip. Upon examination I found the ulcer to present the following characters: It was situated on the centre of the lip, extending from its anterior margin to near the frænum, oval in form, and, the lip being much swollen, about five-eighths of an inch in its longest diameter. Its surface was hollow, as if scooped out, and covered with a layer of dirty greyish lymph; the edges were hard, slightly elevated, and sloping a little from within outward; the base well defined, and very hard, feeling, when pressed between the thumb and finger, like a button or ring of fibro-cartilage.

On inquiry, I learned that about two weeks previous the lip had become indurated at the centre, where she had had a slight chap, after which the induration increased until it had involved the whole thickness of the lip, and then—about a week after—it commenced to ulcerate. On my informing her that the ulcer was undoubtedly of a syphilitic character, and asking her as to how and when she became infected, I received the following statement, which, from what I since have learned, I believe to be true. About three weeks before, she had been at a picnic, and was there in company with a young man, (whom *I knew* to have been laboring under *tertiary syphilis*, and had also at that time some indolent sores on the inside of his lips,) and that, at one time during the day, when he had been smoking a segar through a very beautiful amber mouth-piece, she playfully took it from him and placed it in her mouth. In the evening he accompanied her home, and in parting, impressed several kisses upon her lips, one of which was rather prolonged, in order, as he said, to take a good parting kiss, as he would leave the neighborhood in a few days. She felt nothing unusual about the lip until about a week afterward, when the induration commenced; but thinks she had a slight chap or abrasion on it at that time, where the induration afterward occurred.

On further examination I found that no visible secondary or constitutional symptoms had as yet been developed, *and also, that there was no local disease, or evidence that there had been any, on any other part of her body.* To all appearances, the disorder was as yet only local.

I applied solid nitrate of silver—the stick being brought to a fine point—thoroughly to every part of the ulcer, and the slough came away in a few days, the ulcer presenting rather an aggravated condition, when I re-applied the nitrate. From this time it commenced to heal—the nitrate being applied as often as was deemed necessary—and in about three weeks the sore was entirely healed, but considerable hardness remained for some time after, which, however, disappeared entirely under the subsequent constitutional treatment.

I remarked that when I first saw the patient, there was only the primary sore on the lips. In the course, however, of a few weeks—about five weeks from the appearance of the local lesion—secondary symptoms manifested themselves; such as the characteristic eruption, sore throat, pain in the ears, joints, etc., and enlargements of the cervical glands, with pain extending to the mastoid processes on both sides. She suffered also

for some time from rheumatism (syphilitic) of the left arm, preventing its use; she also had some non-suppurating buboes, but only on the left side. The eruption, as I have said, was markedly characteristic, and was most numerous on the forehead, scalp, face, neck, breast, and arms; there was some also on the body and lower extremities, but not so numerous. It was at its height about ten days from its appearance, remained stationary about a week, and had disappeared again in three weeks more. The sore throat—not ulcerated, but only a little inflamed—enlargement of the glands, pain in the ears, and some soreness of the joints remained some weeks, longer. The whole course of treatment lasted between three and four months, when I discharged her seemingly cured. I have seen her but a few days since, and she tells me that she continues in perfect health.

The treatment, constitutionally, consisted of iodide of potassium, in doses ranging from five to fifteen grains, three times a day, given in compound syrup of sarsaparilla, with the bi-chloride of mercury in half-grain doses until the gums were slightly touched, when it was omitted; morphine was given to relieve the pain.

A few days after I was called to see this case, a young man came to my office, stating that he had a sore lip, which pained him considerably, and that he felt very uneasy about it, "especially as he had seen a lady having a very sore lip." On asking him more particularly, I learned that he had been in company with this same Miss M. H. a few days after the sore on her lip commenced, and not thinking of any danger, had kissed her. The sore was not as yet large, but had the characteristic appearance of an indurated chancre. I applied nitrate of silver thoroughly then, and again in a few days after, after which it healed nicely, and then gave the usual constitutional treatment, and up to this time no constitutional symptoms have appeared.

These cases are interesting as instances of the disease being communicated in rather an unusual channel.

The first case is also particularly interesting, as tending to determine the mooted point as to the communicability of tertiary syphilis. There can be no question that the young man had at the time well defined tertiary syphilis; the sore on the young lady's lip was a "well-marked initial lesion," and followed by "characteristic constitutional syphilis."

—— To prevent metals from rusting, dip the article into very dilute nitric acid, and afterward immerse it in linseed oil.

Impure Glycerine.

Mr. Henry Bower, of Philadelphia, writes to the *Chem. News* on this topic as follows:

"The writer of the article on Glycerine in *Kunst und Gewerbeblatt* is correct in attributing the acrid, irritating properties of some glycerine to the mode of preparation; but I have seen distilled glycerine which was quite as unsuitable for medicinal or surgical purposes as any spoken of. The volatile fatty acids, and ethers, which exist in crude glycerine, are sometimes condensed with the glycerine, and these have very irritating properties.

In the glycerine which is made without distillation, the volatile acids and ethers exist, but not in the same state as after distillation, the heat required for this process decomposing them into some modification of their original state.

The great cause of irritation in glycerine which has not been properly prepared, is the presence of oxalic acid and of formic acid; these are produced by the action of sulphuric acid upon the glycerine, forming the first-mentioned acid, and this in its turn acts upon the glycerine, giving rise to formic acid, the irritating properties of which are well known.

The nitrate of silver test I have always considered most reliable. Glycerine which shows no reaction with this salt may be considered suitable for all uses, as it indicates not only the presence of chlorine or chlorides, but is, as well, reduced by acids, which may exist in the glycerine."

Syrup Ferri Iodidi.

Dr. Attfield read a paper in the Pharmaceutical Society on the "*Preservation of Syrup of Iodide of Iron*," by Mr. T. B. Groves, F. C. S., who has for some time been engaged in devising means for preserving the syrup. He had found that it kept better when made with iron filings instead of pure iron in the form of wire, which he attributed to the presence of impurities in the filings. He had added dilute sulphuric and phosphoric acids as preservative agents, and had obtained successful results with them. Mr. Groves prepared a number of specimens of the syrup, and to one he added 1 minim of dilute phosphoric acid to the oz.; to another, 2 minims of dilute phosphoric to the oz.; to a third, 2 minims of dilute phosphoric and 1 minim of dilute sulphuric acid to the oz.; and to another specimen 8 drops of phosphoric acid. He had found that phosphoric acid was the only acid to be relied on, and it was very necessary not to add the acid before the syrup had cooled.

The President said that as Dr. REDWOOD had assisted in compiling the present Pharmacopœia, he would, perhaps, give them his opinion respecting the method proposed by Mr. Groves.

Dr. REDWOOD said that he was not at all prepared to admit that there was any occasion to make the alteration; the syrup of the British Pharmacopœia would keep for any reasonable time if properly prepared.

Mr. INCE greatly disapproved of such an addition, and thought it quite unnecessary. He had for a long time, before the Pharmacopœia was issued, made it according to that form with the most satisfactory results. The Pharmacopœia form was the same as that of the French Codex, which had always given good results.

Mr. GALE had adopted the form given in the present Pharmacopœia for ten years, and he had always found it successful; the syrup would keep well for six months.

Mr. WOOD, of New York, could not agree with all the remarks he had heard from Mr. Ince and Mr. Gale; he had found that if the syrup of iodide of iron was kept longer than three months, a layer was formed on the surface.

Mr. UMNEY had also found a layer on the surface after three months; the syrup would keep very well for that time by putting it into bottles while hot.—*Chem. News.*

French Fossil Remains.

In the commune of Tayac, in the department of La Dordogne, France, seven fossil skeletons have been discovered, the utensils and arms surrounding which indicate the remote period of the age of stone, before the use of metals was discovered.

Reviews and Book Notices.

NOTES ON BOOKS.

Among American physicians who have achieved a literally world-wide reputation by their studies in some branch of medical science, one of the most prominent is Dr. J. AITKEN MEIGS, of Philadelphia, formerly Professor of the Institutes of Medicine in the Medical Department of Pennsylvania College, Lecturer on Physiology in the Franklin Institute, and member, active or honorary, of numerous learned societies, here and in Europe. Unfortunately for his fame, his labors are nearly all buried in those cemeteries of information, the transactions of learned societies, and scientific periodicals, but they are of such deep significance and wide interest that we wish to direct to them more general attention.

His studies have largely been directed to physiology and ethnology, and in this latter science especially to craniology. In this he has no superior, and indeed, it may be said, that as a science it did not exist before he brought to bear upon it his severe and rigid methods of analysis. The magnificent collection of Dr. S. G. MORTON gave him the material to work upon, and while on that material Dr. MORTON erected a beautiful but baseless hypothesis, Dr. MEIGS drew from it those laws of cranial form which are now acknowledged to be universally valid.

The earliest of his works on this topic was the "Catalogue of Human Crania in the Collection of the Academy of Natural Sciences of Philadelphia," 1857, pp. 112. Portions of this also appeared in NOTT & GLIDDON'S "Types of Mankind." Two years afterward, he illustrated the true principles of craniology in an admirable essay before the Academy of Natural Sciences of Philadelphia, entitled, "Description of a Deformed Fragmentary Human Skull, found in an Ancient Quarry-Cave at Jerusalem; with an Attempt to Determine, by its Configuration alone, the Ethnical Type to which it belongs." This is a model of acute scientific reasoning. The rules which he here foreshadowed, he in part expressed more fully the next year, in an essay before the same body, on "The Form of the Occiput in the Various Races of Men." The method employed in arriving at these results he subsequently stated in an article on "The Mensuration of the Human Skull," in the *North American Medico-Chirurgical Review* for September, 1861. But the most interesting and most complete of his labors is a treatise of 39 pages, published in 1866, "Observations upon the Cranial Forms of the American Aborigines." This sums up the conscientious study of years, and places the whole subject of American craniology in a new light.

Had we the space, we would be glad to give a summary of these instructive osteological investigations, but at present we can only refer to them, and call attention to their purity of method and valuable results.

We recommend as of great practical value, and rich in thoughtful suggestions, an essay prepared at the request of the Prison Association of New York, for insertion in their twenty-third annual report, and reprinted by their order, entitled "Prison Hygiene." The author is Dr. JNO. H. GRISCOM, one of the Vice-Presidents of the Association, and widely known, as well for

his professional writings as his sympathy and thorough acquaintance with the unfortunate class of beings whose welfare he has discussed.

On Diseases of the Skin. A System of Cutaneous Medicine. By Erasmus Wilson, F. R. S. Seventh American, from the Sixth and Revised English Edition. With Twenty Plates and Illustrations on Wood. Philadelphia: Henry C. Lea. 1868. One vol., 8vo., cloth, pp. 808. *Price* $9.50

The simple fact that Dr. Wilson's work, first published in 1842, has gone through six editions in England and seven in our own country, is sufficient evidence, if evidence were wanted, that it stands in the very foremost rank among authorities on cutaneous diseases. We doubt if any other work on this branch of medicine can compare with it in popularity.

The present edition has been thoroughly revised, and in many parts re-written, and especial attention has been given to improvements in treatment. Besides the plates previously furnished, others have been added, prepared originally by the author to illustrate his work on "Constitutional Syphilis and Syphilitic Eruptions." This is the more appropriate, as in the recent editions the affections arising from syphilis have been more prominently treated. They add materially to the value of the work.

The Neuroses of the Skin; Their Pathology and Treatment. By Howard F. Damon, A. M., M. D. Philadelphia: J. B. Lippincott & Co. 1868. One vol., 8vo., cloth, pp. 113.

Dr. Wilson, who adopts what he calls "the clinical classification" of skin diseases, divides them into twenty-two groups, and so far from expressing any hope that this rather startling number will be decreased, rather inclines to believe that careful diagnosis will augment it.

Dr. Damon, on the other hand, in the monograph before us, proposes to reduce all cutaneous affections (excluding the syphilodermata) into four classes, as follows: 1. Neuroses of the Skin. 2. Functional Diseases of the Cutaneous Glands. 3. Inflammations of the Skin: 4. Structural Lesions of the Skin. The present monograph, he informs us, "is intended to supply all that is now positively known of the first of these classes."

He divides neuroses into two kinds, according as sensibility is increased or diminished—hyperæsthesia and anæsthesia. Under the former are included dermalgia, prurigo, urticaria, and zoster; under the latter, loss of feeling and touch.

The diseases are carefully described, both from the best authorities and original observation, and rules for treatment, with numerous formulæ laid down, which will be found of great practical use. Without discussing the new classification proposed, which certainly lays itself open to criticism as founded on an *a priori* hypothesis, instead of actual clinical appearances, we can conscientiously recommend the book as carefully written and embodying much really valuable information.

Electro-Physiology and Therapeutics: Being a Study of the Electrical and other Physical Phenomena of the Muscular and other Systems during Health and Disease, including the Phenomena of the Electrical Fishes. By Charles E. Morgan, A. B., M. D. New York: W. Wood & Co., 61 Walker Street. 1868. One vol., 8vo., cloth, pp. 714.

Unfortunately for science, the talented young author of this admirable treatise was carried off by death ere he had given it the final touches which his work demanded. Nevertheless, it is complete as it stands, and we shall with difficulty find, in any language, a more exhaustive, clear, and correct account of all the laws and phenomena of electro-physiology. The whole range of European scientific literature is laid under contribution, the most recent discoveries are detailed, the numerous and complicated apparatus devised to experiment with this mysterious force are described, the mathematical formulæ which express its actions are analyzed, and its applications to the cure of disease are rehearsed and judged with keen medical insight.

It is entirely out of the question for us to give a synopsis of the contents in detail. We can safely say, that whatever any one wants to know about electro-physiology, he can here find, stated with great precision, and from the latest standpoint of science. It is true that some of the therapeutic applications which have attracted attention within the last year or two, and notably in our own country, are not to be found. But this is probably as much owing to the doubt which still hangs over them, as to any other reason.

The book is illustrated with one hundred and seventy-one wood-cuts, generally well cut and printed. The absence of the author's eye is visible in an occasional obscurity of expression, and also in a good many typographical errors, especially in the German references, most of which might easily have been avoided. On the whole, the work is highly creditable to the medical profession of our country, and must long remain *the* authority on the subject of which it treats.

Medical and Surgical Reporter.

PHILADELPHIA, MAY 23, 1868.

S. W. BUTLER, M. D., & D. G. BRINTON, M. D., *Editors.*

☞ Medical Society and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence News, etc. etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

☞ To insure publication, articles must be *practical, brief* as possible to do justice to the subject, and *carefully prepared*, so as to require as little revision as possible.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

PANGENESIS.

Most mysterious of all functions is reproduction. The creation of this complex body, these infinite emotions and thoughts, this immortal soul from the action of the spermatozoids on the ovum—what is there more marvellous in the whole of nature? Well might the ancient religions of the Orient discern in the generative act the symbol of all that is god-like, and make it the central object of their worship.

The whole process is environed by marvels. Not only does the male element affect the ovum;—it leaves its impress on the whole nature of the female. Cross a mare with a quagga or zebra, and all her subsequent foals by stallions may be striped; fertilize an orange flower with pollen from a lemon, and the fruit will bear stripes of perfectly characterised lemon peel. Again, how singular are the laws of inheritance! A horse is trained to certain paces, and its colt adopts them without instruction; teach a dog to fetch and carry, and its pups will be born retrievers; literally the father's eat grapes, and the children's teeth are set on edge. Capacities for infinite variations in form lie dormant in the living creature inherited from its progenitors.

There is an ephemous insect which in the course of its brief life assumes in turn not less than a score of changes in structure; in other of the lower animals eyes suddenly appear where were previously no trace of such organs; wings and legs burst forth from the sluggish grub, and he is metamorphosed into a gaudy butterfly. These are regular variations, phases in the normal history of the individual.

But there are others operating under the law of Reversion or Atavism even more extraordinary. Long lost characteristics, physical or mental, of remote progenitors, suddenly recur under favoring conditions. Traits which have disappeared during hundreds of generations will suddenly reappear in all their original force when circumstances favor them. Occasionally a domestic animal will display all the feral ferosity and physical marks of its wild ancestor; diseases and monstrosities will lie in abeyance in families for centuries, and then all at once develope in all their traditional violence. We talk of sex, and think it a primal difference. All a mistake. Secondary characters of the opposite sex lie latent in every organic being, ready to be evolved when the reproductive organs are injured. The castrato acquires the voice, the form, the manner, and the mind of a woman; excise the ovaries, and the woman grows a beard, her breasts disappear, her voice roughens, and she is called masculine; splay the bitch, and all trace of femininity disappears; cases are recorded of hens suffering from diseased ovaries, who assumed the voice, spurs, plumage and warlike disposition of the cock; and of ducks who when they ceased laying put on the gayer colors, and adopted the habits of drakes.

Hundreds of such narratives, stranger than any tale of oriental magic are contained in a work now lying before us—Mr. CHARLES DARWIN'S "Variations of Animals and Plants under Domestication." It has recently been published in this country with a preface by Professor ASA GRAY, by ORANGE JUDD & Co., 245 Broadway, New York. It is an immense repertory of information on the subject of reproduction and variation. It is hard to say whether it has more interest to the physician, the physiologist, or the agriculturist. We select from it but one point to bring before our readers. It is the explanation offered of these strange facts we have just been mentioning.

To meet them, Mr. DARWIN offers what he

calls the provisional hypothesis of pangenesis. It is simple and clear. Each organic structure is made up of cells peculiar to itself. This is universally conceded. Now for the hypothesis. Imagine that each cell throws off innumerable minute atoms capable of propagation by self division, and under favorable circumstances of development, into cells like those from which they were derived, and you have the whole theory.

These atoms are transmitted from parent to offspring through all generations, from the male to the female and *vice versa*, ready at any suitable time to manufacture the organ from which they proceeded, and to call forth their corresponding mental manifestation.

Think this over, and it explains very satisfactorily all the marvels we have adduced. In reflecting on it but one difficulty occurs to us. If the male element derives its potency from these atoms, which are everywhere dispersed in countless numbers throughout the body, why is the spermatic secretion the only fluid capable of thus impressing the female? But we do not venture to enter on these abstruse discussions. Our less ambitious purpose is merely to bring to our reader's notice this work of the profoundest living thinker in the domain of natural history, and to recommend it to their careful study.

Notes and Comments.

The Cost of an Epidemic.

The following curious estimates show the cost of an epidemic to a community, and the importance and value of efficient sanitary regulations that will prevent avoidable sickness and death. Our communities do not appreciate the value of sanitary laws, and it is one of the most difficult tasks undertaken by our profession—that of enlightening them on the subject.

"Dr. Beveridge, in an excellent paper on the Statistics of the Recent Epidemic of Typhus in Aberdeen, which has lasted nearly three years, and which he traces to overcrowding, makes the following calculation of its cost. Treatment of 4631 cases for 25½ days, at 5s. per week, £4217 : 10; loss of labor for 25½ days of 3804 individuals (excluding children) at 10s. per week, £5928 : 14; loss by adult deaths—value of labor of 184 males, at £13 per annum, for 10 years, £23,920; value of labor of 255 females at £6 : 10s. per annum, for 10 years, £15,175; loss by deaths of 51 children and young persons, allowing one-half to die before attaining adult life, viz.—value of labor of 12 males, for 20 years, at £13 per annum, £3120; value of labor of 12 females, for 20 years, at £6 : 10 per annum, £1560; probable cost of the epidemic, £55,021 : 4. This estimate is, at the best, but a very rough approximation; but the whole has been kept down to the lowest figure, so that the result is in all probability understated, and yet the amount is a high one—equal, in fact, to a tax on the inhabitants of something over fifteen shillings per head. If, then, such has been the cost in a small and comparatively healthy town like Aberdeen, what must it have been in the larger towns where this epidemic has been raging, and in many of which the rate of mortality has been higher, and, if the conclusions come to as to the probable cause are correct, it follows that the whole of this waste of human life might have been prevented."

Status of Educated Women Obstetricians in Paris.

Here is something to arouse the indignation of the handful of fossils who seem to have the management of the affairs of the Philadelphia County and the State medical societies. The question is, what will they do with the Academy of Medicine of Paris, with the College of Physicians of this city, and with the medical profession of New York, all of whom recognize women as practitioners of medicine?

The *London Lancet* says that the question of choosing a woman to fill a chair in the Obstetric Section of the Academy of Medicine at Paris, is being considered, and that the chief midwife of the Maternité Hospital will probably be so elected. Madame Alliot, the present incumbent of this office, is a woman of profound knowledge and vast experience, a worthy successor of Mesdames Boivin and La Chapelle, and an honored co-worker with the most enlightened obstetricians.

Accidents.

A somewhat startling statement is made in the report of the Accident Assurance Company, that 2,000,000 of persons, or one in every ten of of the population, receive injury every year from accidents of a more or less serious character. Of these, 10.000 are killed, or die from the direct effects of the accident. The total amount paid in claims by this company is £250,000 since 1849. This is a striking evidence of the advantage reaped by the public in making provision

against those casualties to which all are more or less liable.

Cholera and the Atmosphere.

During the autumn of last year, when the cholera was felt severely in Turin, Father DENZA studied the meteorological condition of the atmosphere; he studied especially the connection between the prevalence of the disease and the absence of ozone. His observations were made at Moncalieri, rather more than half a mile from the town: the electricity was measured as well as the ozone. During the days in August and September, when the cholera was at about its height, the amount of ozone present was variable, but considerable—perhaps about the average. The electricity, however, during these days almost entirely disappeared; it is an interesting observation.

Who was Responsible?

On Monday, the 11th inst., Dr. OSCAR HERMANN DORING, one of the Resident Physicians on Ward's Island, New York city, was found in the upper part of the city in a state—as was supposed—of intoxication. He was committed to a cell until next morning, when it was discovered that he was dying from the effects of a narcotic poison. Through the criminal carelessness of some one, however, the golden opportunity to save life was lost. The unfortunate man's will was found in his pocket, dated May 11th.

Correspondence.

DOMESTIC.

Surgeons on Railways.

EDITORS OF THE MEDICAL AND SURG. REPORTER:

In your issue of April 4th, I find a letter by an "OUT" on the subject of Surgeons on Railways. There is one point in it I find peculiarly gratifying. It is this, that he can readily comprehend why railway corporations should hasten a fortune on the Doctor (ARNOLD), etc., etc. May the happy time soon arrive. I am afraid, however, said corporations take an entirely different view of my claims upon them, as I certainly do myself, and I think perhaps you too. I feel perfectly certain that your correspondent knows nothing whatever of my *plans*.

Let me tell him that I consider the appointment of Surgeons on Railways as but a very small part of them. They are so far important, as being an assurance to the injured that there are competent men at hand; they are farther important that their appointment may be regarded, if they do their whole duty, as the entering end of the wedge to secure that great object—the most prompt and immediate, the most efficient means of relieving sufferering, by railroad injury, that it is in the power of our profession to devise. The first step towards such has hardly been taken as yet by the profession in general. After all the endorsements by eminent Surgeons and leading Societies of *my plans*, not one, as far as I know, outside of the two leading medical journals of New York and Philadelphia, has ever stirred in the matter. Knowing the deep and warm interest that the late VALENTINE MOTT had taken in it, I made an appeal to him in February, 1865, to try and stir up his professional brethren. I may be pardoned for inserting his reply, which was among the last of his letters on professional subjects, dated February 6th. He says: "Since the receipt of your letter I have thought over very carefully the important subject for which you have done so much. From time to time, as an opportunity offers, I will confer with my professional brethren, to see what can be done. You have done your full share, in time and money, for the cause of suffering humanity." In a subsequent interview he told me it was too late for him to work; his race was almost run, and in April this great sympathizer in the cause was no more.

To return to my immediate subject. The mere appointment of Surgeons will not secure the desired ends. Surgeons might be on the train, and yet could do nothing for want of absolutely needful appliances. When a great railroad accident occurs, the circumstances are just the same as they would be were a regiment to go into a fight with or without surgeons in war time, but without ambulance or medical supplies, and trusting to luck and time to get what they wanted for the wounded. In the great Erie disaster, two or three days since, the *New York Herald* reports that the injured were over five hours without proper attendance, without appliances, or even an opiate to soothe their agonies. Is it not possible to do better than this? Are such things creditable to so enlightened an age as this is said to be?

Again, a noble-hearted Pennsylvanian, not in our profession, writes to me a short time since: "Last night, near this place, the locomotive of a passenger train was thrown from the track, the engineer hurt, and the arm of the fireman cut off. With nothing to stop the blood, the poor man bled to death, or so near it that there was

no reaction, and I learn this morning that he is dead. On some one's head the blood of these unfortunate victims will fall." This gentleman knew that among my plans was teaching conductors to apply a tourniquet, and always to carry one. Had such been the case here, the man's life might perhaps have been saved to his family.

My plans, as you know, would make the railroad its own ambulance, the employers its intelligent attendants; apparatus to meet emergencies would be on hand, and life and energies often saved, until placed in the hands of the Surgeon. They have no reference to the ultimate disposition of patients.

Should your correspondent wish to know anything more of them, I would refer him to the New York State Medical Transactions of 1862 and 1863. *Au reste*, I am like himself a working practitioner, and expect to remain so. I have no interest in this matter other than in common with himself and the entire public. The only pecuniary considerations are on the side of loss, the advocacy not having been without considerable attendant expense. I am not, it is true, without hope of reward, but it is not such as Railroad Corporations will be likely to confer. When the principles I have advocated shall be carried out, as sooner or later they assuredly will, either on my plans or better ones, it will be enough for me if my name hereafter be honorably associated with the movement.

Edw'd S. F. Arnold, M. D.

Yonkers, N. Y., April 19, 1868.

OUR CINCINNATI CORRESPONDENCE.

The Public Health.

Editors Medical and Surgical Reporter:

This city as shown by the weekly health reports is one of the healthiest in this country. Our efficient sanitary laws (state and municipal) are to be thanked for this.

The board of health has appointed Professor Clendenin Health Officer for another year, Professor C., has served in this capacity for two years, and merits the position.

Nearly every city in Ohio is now availing itself of the Legislative Health Law, and thus in a quiet way, more is being accomplished for the public good than by any law which the prolific body at Columbus has *conceived* and brought forth for many years. The legislature this winter, in the height of their continuous folly, passed a bill to please those growling, fault-finding members of the profession, who are always looking to a code of ethics to secure professional dignity and success. Their efforts in this direction will compare favorably with the alchemist who, during the last century, sought for the philosopher's stone.

Such objective methods of instilling healthy life into society, or what is the same, into the profession, always fails. The cause lying *within* cannot be reached except subjectively. The noble art must look beyond support for help.

Personals.

By way of personal, it may be mentioned that Professor Wm. Gobrecht has been appointed a city physician to attend the female prison.

Dr. David Judkins has returned from a tour of European medical observation. He speaks in accents of just praise regarding the English profession, and from personal association found that such men as Furguson, Lee, Jenner, Holmes and others, possessed those great qualities for which they have been justly celebrated in this country. No nation exhibits the solid qualities of real worth more than the English. Young students are usually attracted to Paris and French medical men. The latter, justly celebrated, however it is to be presumed, are not in many instances the real attraction. Paris itself *draws*. The elders of our profession on going abroad find much to admire outside of Paris.

The new Hospital, Cincinnati.

Dr. Judkins did not succeed in finding in Europe a hospital superior to the one which Cincinnati is erecting. Our city may well be proud of such an institution, and they should never forget the debt which they owe Dr. Judkins for devoting so much of his time to its successful completion. Upon its occupancy this fall, the staff is to be re-organized.

This delicate task will be made by the trustees with that delicacy and regard to the feelings of the profession which is consistent with a due regard to thorough reform. No local clinique will influence their action, and whatever method of appointment is adopted, *capacity* will be the first test.

The summer schools here are well attended, both the Miami and the Cincinnati College of Medicine and Surgery. The latter has a class of over thirty, which is a large summer attendance for an inland city, during depressing financial times. I have not been able to ascertain the number in attendance at the former, but suppose it larger than the one just referred to. A.

Cincinnati, Ohio, May 19th, 1868.

Veterinary Science Vindicated.

EDITORS MEDICAL AND SURGICAL REPORTER:

In a late issue of the REPORTER was published the associated press dispatch from Washington, announcing that Prof. JOHN GAMGEE had stated that $100,000,000 was lost annually to the country, and by the employment of veterinary science the half of the amount could be saved. This statement of the worthy Professor should be taken for what *his countrymen* would consider it worth, for they know him longest. It is likely to have been of the sensational order.

The great loss of horses and mules annually during the late war is not to be wondered at, when it is known that only *one* Veterinary surgeon of either American or British graduation was in the army, and he lost his life under Gen. Lyon, in Missouri. There may have been a few German graduates in the army, but not many.

Again, and in support of the cause of the great mortality, there appears not to have been one man in the army that knew that the *action* of tartar emetic, *antim. et pot. tart.*, on horses and mules was *inert*, and notwithstanding this well known fact, it was their agent in thoracic affections—judging only by anology, an erroneous and fatal theory, well expressed by Sophocles of old—

> Swift in its march
> Is evil counsel.

If any one, who is well acquainted with the action of medicine on veterinary patients will but examine the list of the medicines supplied to those who were employed to treat the sick animals, he cannot but see the absence of our most certain and reliable agents in the curing of disease, and without which success would almost be a miracle.

The army of the United States is certainly an unfair standpoint from which to view, judge and form a criterion of the success of any branch of the sciences, and more particularly the veterinary, for reasons not necessary to enumerate in this place. But if any one is really interested and would like to get at the truth as to the value of veterinary science, let him but inquire of a few of the most prominent stock raisers in this city.

No better example of its value can ever be seen than the "Douglas mare," lately the property of Thos. Dolan, Esq., of the Keystone Knitting Mills—spavined, pelvic-abscess, pneumonia, stercoral colic repeatedly, on one occasion lasting four days; delivered of a colt by manipulation, swelled legs and other affections of less note. Yet the same mare to-day is as perfect and free from disease as horse ever was, with not a *blemish* to be seen, and brought $975 at public sale a few weeks ago; the colt is alive and valued at $1,000.

R. MCCLURE, V. S.,
Philadelphia.

Allen County, Ohio, Medical Society.

EDITORS MED. AND SURG. REPORTER:

The second annual meeting of this Society was held at this place, Tuesday, May 5th. The Society is organized auxiliary to the Medical Society of the State of Ohio, and now numbers twenty-six members. Thirteen regular meetings have been held, with an average attendance of ten members. This, considering the difficulties those members have to contend with in order to be present, is a very respectable attendance; many gentlemen having from twenty-five to forty miles to travel, in order to be present, and one enthusiastic member, Dr. WILLIAMS, who takes a deep interest in all matters pertaining to the good of the profession, makes a round trip of eighty-four miles to be with us. Thus you see that being an active member of a medical society, like the practice of medicine in the "backwoods," requires a very great sacrifice of personal comfort. Medical societies, their aims and objects, not being clearly understood by our people, we at first met considerable opposition, where it was least expected, from the general public. This spirit of opposition at first assumed rather formidable proportions, but as time passed and the people learned that the "Doctors' Caucus" was *not* for the purpose of organizing schemes of plunder, that an innocent victim was *not* offered a sacrifice on the altar of science at each monthly meeting, that the ashes of their departed were permitted to rest undisturbed, and that the objects of the Society were simply for the elevation of the character and usefulness of the profession, opposition ceased, and the people, who are always right after sober second thought, are now heartily seconding our efforts. Thirteen essays on medical topics have been read. At each meeting a subject is selected for discussion at the next subsequent meeting. In addition to the subject matter of the essay, many interesting cases in practice are reported at each meeting. Standing committees on ethics, surgery, practice, pathology, physiology, and materia medica, are appointed at the annual meeting.

A change in our constitution is contemplated, whereby each applicant for membership will be required to undergo an examination in the fundamental principles of medicine, and thus try to make of *some* practical value the law recently

passed by our Legislature, regulating the practice of medicine.

Dr. McHenry, our very worthy President, who, by virtue of his many good qualities, has a life lease on that office, has been in practice here over thirty years, and has become to be considered one of the "fathers in medicine."

S. A. Baxter. M. D.

Lima, Ohio, May 7th, 1868.

Aluminum *v.* Vulcanite. An improvement in Artificial Teeth.

Editors Med. and Surg. Reporter:

Dr. Alfred Starr, of New York city, has brought for my inspection and chemical examination a set of teeth fastened upon a plate of aluminum, together with some solder for uniting the teeth to the aluminum plate. I have made a chemical examination of this solder, and find that there is neither mercury, arsenic, zinc, or lead in its composition, but that it is composed of a metal which is perfectly harmless in the mouth.

I consider this use of aluminum one of the most scientific improvements in dentistry. Aluminum is the metal of which alum is a salt. For dentistry it is infinitely preferable to gold, being both lighter and cheaper. Between the use of aluminum and hard rubber there can be no comparison; for while aluminum is strong, and the lightest of metals, and perfectly harmless in the mouth; hard rubber is thick, heavier, brittle and exceedingly dangerous, there being many instances of mercurial salivation attributed to its use.

The hard rubber used for base for teeth is composed of rubber, sulphur, and sulphide of mercury, nearly one-third of the whole being sulphide of mercury. This amount of mercury kept constantly in the mouth, cannot but be sometimes injurious, as it is soluble in the saliva.

In addition to the danger of salivation from the mercury in these hard rubber plates there are other dangers unknown to the manufacturer. The sulphide of mercury which is added to the rubber is often adulterated with red lead and bisulphide of arsenic, both of which poisons are soluble in the mouth. By inserting this in your valuable journal, you will be benefiting the public.

Sam'l R. Percy, M. D.,
Professor of Materia Medica.

New York, May, 1863.

Rupture of the Uterus. Recovery.

Editors Medical and Surgical Reporter:

On reading the case of L., in your last number, and your comments thereon, about rupture of the uterus, the following case, occurring in my practice a few years ago, was brought to my recollection.

I was sent for, early in the day, to visit a tailor's wife, who had been in labor some time. I found another physician in attendance. The head had descended pretty well into the pelvis, and the woman, having been in severe labor about six hours, began to show symptoms of exhaustion. I advised the forceps; the other gentleman thought that he would wait awhile. I left. About two hours afterward the husband came for me, saying that the Doctor wanted me immediately. When I returned, the woman was almost pulseless, face pinched, severe pain in right iliac region, no external hemorrhage. The Doctor told me, that about thirty minutes before my arrival, this condition of things came on after a severe uterine contraction. On a digital examination I found that the head had receded to the brim of the pelvis, and that the foot of the child could be distinctly felt without the uterus, through the abdominal walls. The woman was a thin spare person. We first thought of the forceps, and attempted to apply a blade, but the head receded. The blade was withdrawn, the hand introduced, and the child was turned without the least difficulty, there being no uterine contraction, and delivered in a few minutes. After the delivery we could find a large rent in the uterus. Luckily, no bowel protruded. We naturally supposed the woman must die. We gave large doses of tincture of opium, both to revive her and to control the pain. She rallied, and in three weeks she was able to be out of bed. I saw her alive and well two years afterward.

John Burke, M. D.

301 *E. Broadway, N. Y.*

News and Miscellany.

The Fever at Port Louis, Mauritius.

Mr. Nicholas Pike, the American Consul at Port Louis, Mauritius, in a dispatch to Collector Smythe, of New York, says, "that between the date of his last dispatch (Feb. 17) and March 3, the epidemic fever had increased very rapidly. Eighteen hundred persons died in January, and it was thought that February would show even a greater mortality. The mortality is mainly among the higher classes, and the malady has assumed a typhoid form. Of 140 American seamen in port, only one had died. The steamship Warrior, from New York, with 50 men on board, had only three men fit for duty, and a number of American vessels had proceeded to sea with

most of their crews in a sickly state. It was almost impossible to procure men to man vessels, as almost every seaman was sick. Not a single vessel in the harbor had escaped, and in some cases officers and crew had all been down. The mail packet, which was to sail on the 6th, had every state-room and berth engaged, so anxious were the people to get away. The disease had made its appearance at Mahobourg, on the windward side of the island, and in the district of Hacq, in the north-east part of the island. * * The population of Port Louis is between 40,000 and 50,000, and that of the Island of Mauritius between 300,000 and 400,000. The island has suffered severely from cholera on several occasions."

Scarlatina in Boston.

We clip, from the *Providence Journal*, the following notice:

One of the severest epidemics of scarlet fever ever known in this country, has prevailed in the city of Boston during the past year, and still continues, though the number of deaths is gradually diminishing. The whole number of deaths in that city, from scarlatina, from the first of January, 1867, to the first of April, 1868, has been 428. Our figures are taken from the weekly reports of deaths, and may differ slightly from the official reports when they shall be made. It is to be remembered, also, that from the beginning of the present year, the figures have been for the city as enlarged by the annexation of Roxbury.

There were deaths in Boston from scarlatina in all but one of the sixty-five weeks included in this statement. The greatest number in any one week was 30, in the week ending Dec. 14, 1867. The greatest number in any month was 78, in the four weeks ending Dec. 23. The epidemic seems to have reached its height in Boston about the middle of December. The number of deaths from scarlatina in each month, from January, 1867, to the present time, was as follows, as compiled from the weekly reports:

1867.	January	15	
	February	14	
	March	10	
	April	13	
	May	19	
	June	20	
	July	23	
	August	18	
1867.	September	12	
	October	23	
	November	47	
	December	78	
1868.	January	55	
	February	48	
	March	34	
Total			428

Of the whole number of deaths, 262, or considerably more than one-half, were in the last five months of the period. The number of deaths during the year 1867 was about 300.

But 428 deaths from scarlatina represent several thousand cases of the disease, and the deaths are only a small portion of the sad results from it. The disease often leaves effects upon the systems of those who survive, which render life hardly preferable to death.

While it is probable that scarlatina is very slightly, if at all contagious, it often, as in Boston during the past winter, becomes highly epidemic, and spreads with great rapidity and virulence through a whole community. Children, going from a place where the disease is not epidemic to a place where it is so, are very liable to take the disease, though they may not see a case of it. We have had several cases of scarlatina in Providence during the past winter, which were evidently contracted by a few days' residence in Boston; but the disease was not sufficiently contagious to propagate itself in Providence, where there was no epidemic cause present. We suppose that, for months past, a child would run far more risk of taking scarlatina by staying a week in Boston, without seeing a case of the disease, than it would by living a month in the house with a case of the disease in Providence. This illustrates what we understand by an epidemic of a disease. It is a cause of disease, wide-spread in a community, and producing its effects upon the whole people, independent of personal communication.

Pleasant Thoughts for Tobacco Users.

Dr. W. H. WETHERBEE, in an article on the Chemistry of Tobacco, in the *Journal of Applied Chemistry*, imparts the following agreeable information to those who delight in the Indian weed.

Among the various adulterations to which chewing tobacco is subject, are lead, copper, antimony, copperas, black hellebore, alum, sugar or molasses, dock leaves, and corrosive sublimate. These are added to give flavor or pungency to the weaker and poorer varieties, and the legitimate effects of such villainous compounds need not be mentioned. Too much of the "fine-cut chewing tobacco" is wrapped in an inferior kind of tinfoil, having a great proportion of lead in its composition, and partial paralysis of the tongue and muscles of the mouth has followed its use, from the lead salts thus formed, when the simple use of tobacco in its pure state would have failed to produce results so deleterious.

For chewing purposes, an article called British herb tobacco has been substituted for the genuine "weed," and is composed of thyme, marjoram, and hyssop, of each two ounces; coltsfoot, three ounces; betony and eyebright, of each four ounces; rosemary and lavender, of each

eight ounces: the whole mixed, pressed together, and cut in the form of plug-tobacco. It is harmless, cheap, and among the poorer classes answers a good purpose. For smoking purposes, the bark of the cascarilla is sometimes added to impart a peculiar flavor, and the leaves of various other plants are sometimes substituted in part for those of the tobacco. Nitre is sometimes added to make it burn more rapidly, though it is frequently found in small quantities as a product of the chemical process of curing the plant. Potash, as before observed, exists already formed as one of the component parts of tobacco, aside from the trace of the nitrate which it contains, and in the usual process of preparation a weak solution of potash, or its carbonate, is also sprinkled upon the leaves, and it is not unlikely, that while being dried, they may absorb a portion of nitrogen and oxygen from the atmosphere, sufficient to form a small amount of the nitrate.

Snuff-taking, though at one time almost a universal practice, has now fallen greatly into disuse, though in some of the Southern and Western States, and among the Spanish dames of the West Indies, the disgusting habit of *chewing snuff*, or, as it is called, *dipping*, is still followed to a great extent. Medicinally, it is recommended for colds, catarrh in the head, and several other purposes. Snuff is usually adulterated with salt, for the purpose of increasing its weight and keeping it moist, and with urine, muriate of ammonia, and powdered glass, to increase its acrimony and pungency. Some kinds are moistened with cane-juice, or molasses and water, which give rise to the vinous fermentation, and rum is sometimes added to produce the same flavor. Quick-lime or caustic alkali is sometimes added to the tobacco to develope the flavor, as well as to neutralize the acid formed in fermentation

Many other substances are also added, either to color or flavor, thus forming the different varieties of Scotch, Welsh, Spanish, Lundyfoot, French, Russian, Strasburgh, Maccaboy, and many others. They are sometimes medicated with subsulphate of mercury, nitrate of silver, etc., for catarrh, headache, inflammation of the eyes, and other diseases of the nerves of the head, the mucous membrane of the nose, etc.

Back Numbers Wanted.

We would call the special attention of subscribers and readers to the list of back numbers of the Reporter, that we are much in need of. It will be found on *second page* of cover. It will be observed that some new numbers have been added to the list, viz., 578, 579, 580, March 28, April 4 and 11.

— The oldest doctor in the world, Professor F. Verdugo, Salamanca, Spain, died lately, aged 105 years. He had practised medicine 80 years.

[Notices inserted in this column gratis, and are solicited from all parts of the country; Obituary Notices and Resolutions of Societies at ten cents per line, ten words to the line.]

MARRIED.

Anderson—Mendenhall.—In Cincinnati, May 13th, Lafe Anderson, Jr., and Miss Emma, daughter of George Mendenhall, M. D., all of Cincinnati.

Brientnall—Agans.—May 14, 1868, at the House of Prayer, Newark, N. J., by the Rev. W. A. W. Maybin, assisted by the rector, Rev. H. C. Goodwin, John H. H. Brientnall, M. D., and Harriet T., only daughter of Thomas Agans, Esq.

Browne—Orton.—At Alexandria, Va., May 4, by the Rev. J. E. Wheeler, Mr. George E. Browne, of Maine, and Miss Carrie S., eldest daughter of the late J. R. Orton, of Brooklyn, N. Y.

Hassler—Burnett.—In this city, May 14, at the residence of the bride's father, by the Rev. J. H. Castle, D.D., Ferdinand A. Hassler, M. D., and Miss Annie Kate, only daughter of Eli S. Burnett, all of West Philadelphia.

Hewston—Ellis.—In New York, May 5, by the Rev. Alexander Vinton, D. D., at the residence of the bride's father, General John Hewston, of San Francisco, and Susan M. Ellis, daughter of Dr. S. C. Ellis.

Leach—Barton.—In this city, on the 14th inst., by Rev. Samuel Irwin, No. 1402 Christian Street, Royal D. Leach, M. D., of Kent co., Del., and Miss Emeline Barton, of Ulster co., New York.

Palmer—White.—In Cincinnati, May 5th, at the residence of R. M. White, 75 Westley Avenue, by Rev. Henry Smith, D.D., Dr. Chauncey D. Palmer and M. Addie White.

Smith—Snow.—In New York, April 23, at the residence of the bride's parents, by the Rev. J. P. Thompson, D.D., Samuel St. John Smith, M. D., of Perth Amboy, N. J., and Ellen M. Snow, of New York city.

Treacy—Smith.—On the 12th inst., at St. Joseph's Church, by the Rev. P. S. Blenkinsop, Dr. D. J. Treacy, and Miss Mary F. Smith, both of this city.

DIED.

Culbertson.—At Stowartsville, Mo., May 8th, of adynamic pneumonia, Mrs. Mary E. Culbertson, wife of Dr. A. J. Culbertson, aged 30 years. Ohio, Indiana, and Illinois papers please copy.

Faught.—In Covington, Ky., May 4, after a long and painful illness, of childbed dysentery, succeeded by typhoid fever, Mrs. Hattie N., wife of A. E. Faught, and daughter of Dr. S. S. and Orpha Cook, aged 25 years, 4 months, and 20 days.

Keyt.—In Cincinnati, on the 8th inst., of disease of the heart, Louisa, youngest daughter of Dr. Alonzo T. and Susannah D. Keyt.

Palmer.—On the 8th inst., suddenly, at Stonington, Conn., Dr. Geo. E. Palmer.

Reid.—In this city, on the 13th inst., Anna C., wife of N. C. Reid, M. D.

Wheeler.—In New York, May 7th, of hemorrhage from the lungs, Horace K. Wheeler, M. D., Assistant Physician of the Bloomingdale Hospital for the Insane.

Winston.—In Vienna, Austria, May 10th, Joseph Sands Winston, M. D., youngest son of Frederick S. Winston, of New York.

METEOROLOGY.

May.	4,	5,	6,	7,	8,	9,	10.
Wind	S. W.	S. E.	N. E.	E.	N. W.	N. W.	N. W.
Weather	Clear H'vy Fog.	Cl'dy. Rain.	Cl'dy.	Cl'dy. Rain. t. & l.	Cl'dy.	Clear.	Clear.
Depth Rain.		1-10		1 4-10			
Thermometer.							
Minimum	40°	43°	47°	42°	35°	38°	43°
At 8, A. M.	52	57	56	50	48	54	58
At 12, M.	65	60	60	51	55	60	65
At 3, P. M.	66	61	60	52	54	63	63
Mean	55.75	55.25	55.75	48.75	48.	53.75	57.25
Barometer.							
At 12, M.	30.2	29.9	29.9	29.7	29.9	30.	30.1

Germantown, Pa. B. J. Lebdon.